

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1034113

Luminaire Tested: S124RDIW-B350D770UB40-4F0-XX-W2A-F1

Issue Date: 5/6/2025

Test Information

Test Method: LM-79-2019
Report Number: P1034113
REPORT IS A COMBINATION OF REPORTS P1000471 AND P1007351
Test Lab: INNOVATION CENTER
Issue Date: 5/6/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124RDIW-B350D770UB40-4F0-XX-W2A-F1
Description: Define 4 Regressed Direct/Indirect Wall Mount with 4000K BioUP LEDs {m-DER=0.865}
{m-EER=0.951}
Light Source: -
Ballast/Driver: -

Summary

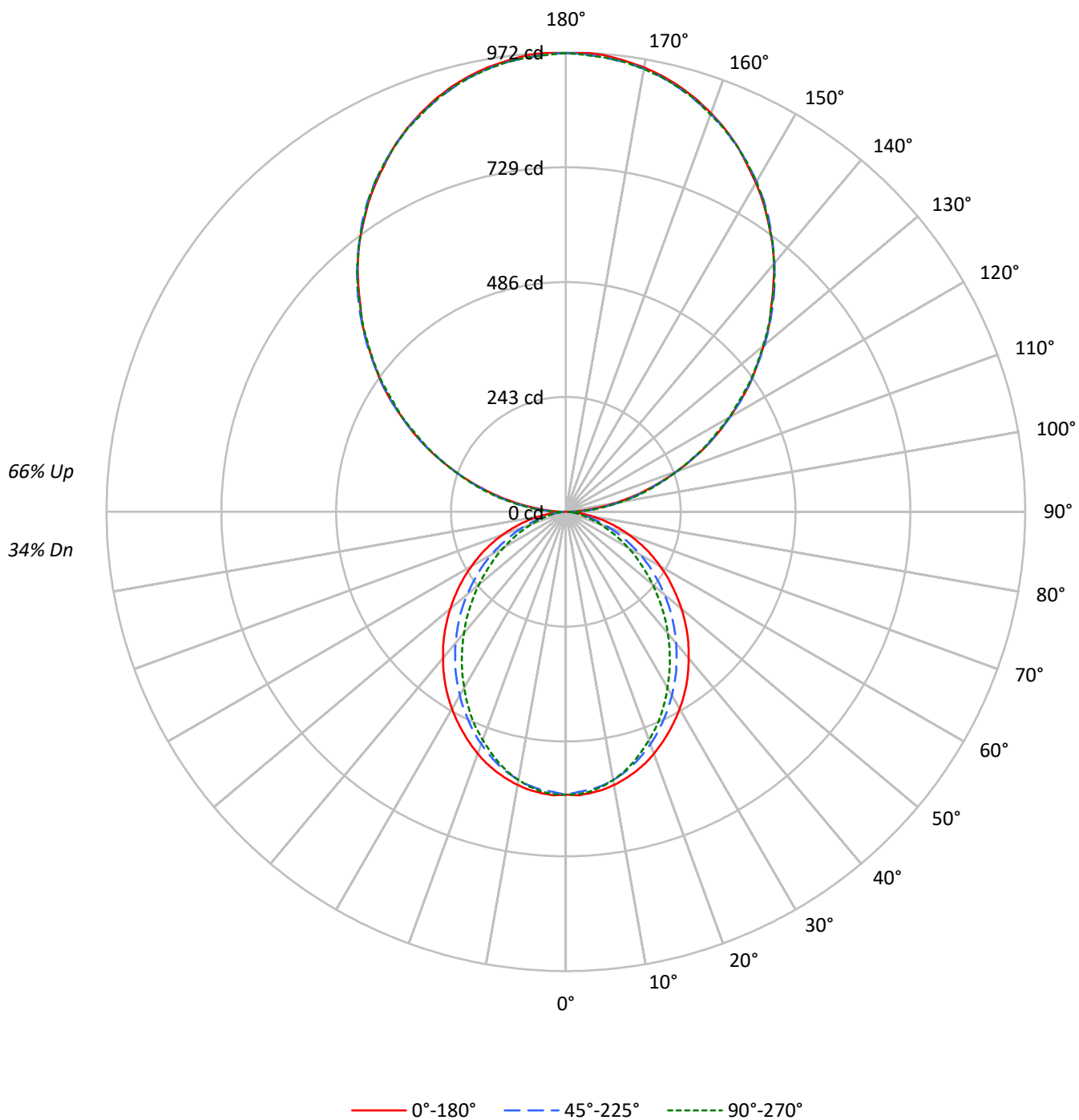
Lumens per Lamp: N/A
Luminaire Lumens: 4078.0 lumens
Efficiency: N/A
Efficacy: 112.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.09 / 1.24
Luminous Opening: Rectangular w/ Sides (W: 0.33' x L: 4' x H: 0.1')
CIE Type: Semi-Indirect

Input Watts (W): 36.2
Input Voltage (V):
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	103	103	103	103	93	93	93	93	74	74	74	57	57	57	41	41	41
1	94	90	87	83	85	82	78	76	65	63	61	51	49	48	37	36	35
2	86	79	73	68	77	71	67	62	57	54	51	45	42	40	33	31	30
3	79	69	62	57	71	63	57	52	51	47	43	40	37	34	29	27	26
4	72	62	54	48	65	56	49	44	45	40	37	35	32	29	26	24	22
5	66	55	47	41	59	50	43	38	40	35	32	32	28	25	24	21	19
6	61	49	41	36	55	45	38	33	36	31	28	29	25	22	21	19	17
7	56	44	37	31	51	40	34	29	33	28	24	26	22	20	20	17	15
8	52	40	33	27	47	37	30	25	30	25	22	24	20	18	18	16	14
9	48	37	29	24	44	33	27	23	27	23	19	22	18	16	17	14	12
10	45	33	26	22	41	31	24	20	25	21	17	20	17	14	15	13	11

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4880	4880	4880
5°	4881	4736	4737
10°	4840	4586	4531
15°	4773	4400	4291
20°	4686	4188	4016
25°	4578	3959	3747
30°	4471	3726	3445
35°	4354	3489	3150
40°	4214	3235	2847
45°	4084	2981	2547
50°	3935	2705	2242
55°	3775	2423	1928
60°	3597	2122	1617
65°	3425	1777	1318
70°	3179	1415	1008
75°	2867	1030	705
80°	2394	633	506
85°	1797	364	279

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 45°
Luminance: 4084 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	56.3	1.4
10°-20°	156.9	3.8
20°-30°	226.6	5.6
30°-40°	256.8	6.3
40°-50°	247.9	6.1
50°-60°	206.1	5.1
60°-70°	142.3	3.5
70°-80°	71.9	1.8
80°-90°	20.3	0.5
90°-100°	63.3	1.6
100°-110°	189.5	4.6
110°-120°	321.9	7.9
120°-130°	424.5	10.4
130°-140°	476.8	11.7
140°-150°	468.6	11.5
150°-160°	394.2	9.7
160°-170°	262.3	6.4
170°-180°	91.8	2.3
0°-30°	439.8	10.8
0°-40°	696.6	17.1
0°-60°	1150.6	28.2
0°-90°	1385.1	34.0
90°-120°	574.6	14.1
90°-150°	1944.7	47.7
90°-180°	2693.0	66.0
0°-180°	4078.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	598	598	598	598	598	
5°	598	596	590	595	594	57
15°	569	565	554	553	550	160
25°	515	506	488	480	475	237
35°	445	430	407	392	384	278
45°	363	346	318	296	288	280
55°	275	257	227	203	194	246
65°	187	167	138	118	113	185
75°	100	82	61	50	48	105
85°	25	16	14	13	13	27
90°	2	10	16	21	22	5
95°	45	52	57	59	59	49
105°	175	176	179	181	183	185
115°	327	327	326	325	324	323
125°	477	477	476	474	473	425
135°	615	619	619	618	616	476
145°	747	750	751	750	748	467
155°	856	856	855	858	855	394
165°	932	929	928	932	929	263
175°	969	965	964	970	964	92
180°	971	971	971	971	971	

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	598.5	598.5	598.5	598.5	598.5
2.5°	600.4	598.5	593.5	598.5	598.1
5°	597.6	595.8	590.3	594.9	594.0
7.5°	593.5	591.7	584.8	588.0	586.6
10°	587.1	584.8	576.5	578.4	576.5
12.5°	578.8	576.1	566.0	566.9	564.2
15°	569.2	565.1	553.6	552.7	549.5
17.5°	558.2	552.3	539.0	536.7	532.1
20°	544.9	539.0	523.4	519.7	513.8
22.5°	530.3	523.4	506.4	500.5	495.9
25°	514.7	506.4	487.6	479.8	475.3
27.5°	498.6	488.6	468.8	459.7	453.3
30°	481.7	470.2	448.7	437.2	429.9
32.5°	463.8	450.5	428.1	414.3	407.4
35°	445.0	430.3	407.4	391.8	383.6
37.5°	425.3	410.2	385.0	368.0	359.8
40°	404.2	389.1	363.0	343.7	335.5
42.5°	384.1	368.0	340.5	320.8	312.1
45°	363.0	346.0	318.5	296.1	287.8
47.5°	341.4	324.0	295.6	272.2	263.1
50°	319.4	301.6	272.2	249.3	240.6
52.5°	297.0	279.6	249.3	225.9	216.8
55°	275.0	256.6	226.9	203.0	194.3
57.5°	253.4	234.2	204.9	180.6	174.2
60°	230.1	211.7	182.4	158.6	151.2
62.5°	209.0	189.7	159.5	137.9	132.4
65°	187.0	167.3	137.9	118.2	112.7
67.5°	164.1	145.3	117.8	100.4	94.0
70°	142.5	123.3	97.2	82.0	77.5
72.5°	119.6	102.7	78.4	66.0	61.9
75°	99.5	82.5	61.0	50.4	47.7
77.5°	78.4	63.7	45.4	38.0	37.1
80°	58.2	44.9	31.2	29.8	29.3
82.5°	40.8	28.9	22.5	21.5	21.1
85°	24.7	15.6	14.2	13.3	13.3
87.5°	10.5	6.9	6.4	6.0	6.4
90°	2.3	10.5	16.5	21.0	22.5
92.5°	19.5	29.3	33.0	35.3	36.0
95°	45.0	51.8	57.0	59.3	59.3
97.5°	72.1	78.1	84.1	87.1	87.1
100°	105.1	108.1	114.8	116.3	116.3
102.5°	139.6	140.4	146.4	148.6	149.4
105°	174.9	175.6	178.6	180.9	183.2
107.5°	211.7	212.4	213.2	216.2	215.4
110°	249.2	250.7	250.0	248.5	250.7

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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	288.2	288.2	286.7	286.7	286.7
115°	327.3	327.3	325.8	325.0	324.3
117.5°	364.1	364.1	363.3	361.0	358.8
120°	400.8	403.8	401.6	397.8	399.3
122.5°	439.1	439.9	439.1	436.9	433.1
125°	476.6	476.6	475.9	474.4	472.9
127.5°	510.4	512.7	511.2	509.7	508.9
130°	546.5	548.7	548.7	547.2	544.2
132.5°	583.2	584.7	584.0	582.5	581.7
135°	614.8	619.3	619.3	617.8	615.5
137.5°	650.0	652.3	653.8	651.5	652.3
140°	685.3	686.8	686.8	686.1	685.3
142.5°	717.6	719.1	718.3	718.3	718.3
145°	746.9	749.9	750.6	749.9	747.6
147.5°	776.9	780.6	779.9	779.1	778.4
150°	803.9	806.9	806.9	806.9	806.2
152.5°	829.4	830.9	831.7	833.9	831.7
155°	855.7	855.7	855.0	858.0	855.0
157.5°	878.2	876.7	876.7	879.0	876.7
160°	897.7	897.0	896.2	898.5	894.7
162.5°	915.8	913.5	912.8	917.3	913.5
165°	931.5	929.3	927.8	932.3	929.3
167.5°	944.3	941.3	941.3	945.8	941.3
170°	954.8	951.0	951.8	956.3	951.0
172.5°	962.3	959.3	959.3	964.5	959.3
175°	969.1	965.3	964.5	969.8	964.5
177.5°	972.1	968.3	968.3	973.6	967.5
180°	970.6	970.6	970.6	970.6	970.6

(END OF REPORT)